MISCELLANEOUS NOTES

24. TYPE SPECIMEN OF INSECT *ACANTHACORYDALIS HORRENDA* NAVAS (MEGALOPTERA) IN THE COLLECTION OF BOMBAY NATURAL HISTORY SOCIETY¹

Naresh Chaturvedi²

¹Accepted December 19, 2005

²Bombay Natural History Society, Hornbill House, Shaheed Bhagat Singh Marg, Mumbai 400 001, Maharashtra, India.

Order Neuroptera is classified by Imms (1977) into two suborders, i.e. Megaloptera and Plannipennia. Suborder Megaloptera is a small group of rare and primitive insects commonly known as Alderflies and Snake flies and very little information is available on them (Varshney 2002). Ghosh (1998) mentioned that 125 genera and 335 species of Neuroptera are found in India, out of which 8 genera and 25 species belong to the suborder Megaloptera, which is represented by two families, i.e. Corydalidae and Inocellidae. According to Liu et al. (2005), eight species of Acanthacorydalis are found in Asia of which seven species are restricted only to the Oriental region and one also exists in Palaearctic Region. They have also identified six areas of endemism of this genus of which one is north-east India. Ghosh (2000) has extensively worked on this group of insects found in India and has described three species of the genus Acanthacorydalis from northeast India: Acanthacorydalis asiatica Wood Mason (described by Wood Mason as Corydalis asiatica), A. orientalis McLachlan and A. horrenda Navas. While working out an identification key for these species, Ghosh has remarked that, "due to paucity of the material for examination and non-availability of the literature author reserves comments on the species A. horrenda Navas. Varshney (2005) studied the collection of suborder Megaloptera present in Zoological Survey of India (ZSI) and has not mentioned the presence of Acanthacorydalis horrenda species in the ZSI collection. The entomological collection of the Bombay Natural History Society has a specimen of Acanthacorydalis horrenda Navas labelled as 'type specimen' (Fig. 1).

Locality: Naga Hills, *c*. 1,311 m (4300 ft). **Date of Collection**: April, 1930. Sex: Male.

Collected by: Capt. J.E. Mibreg. Determined by P.J. Navas (1931).

Diganostic Characters: Head square-shaped with three prominent ocelli. The black and brownish markings present on head and thorax are symmetrical. Antenna broken (not



Fig. 1: Acanthacorydalis horrenda Navas

present). Male mandible dark black, two times as long as head, with three minute teeth. Pronotum and mesonotum light brown in middle and black on either side, metanotum brown and little black on sides. Wings smoky and not dark at anterior margin. Forewings with brown spots. Legs black. Male tenth tergite short, stout, and curved ventral. The description of female is not available.

Measurement: Wing Span – Fore wing: 76.50 mm; Hind Wing: 68.55 mm; Body length: 55.48 mm; Prothorax: 15.00 mm; Mesothorax: 5.0 mm. Metathorax: 6.0 mm; Abdomen: 16.35 mm.

The male genitalia are also visible in the specimen.

The body markings and wing venation are illustrated in the attached photograph.

Remarks: Many attempts to obtain the original description of the species published by Navas are unsuccessful. It is observed that *A. horrenda* (Navas) is distinct from other two Indian species in different markings on the head and thorax, long mandibles in male. Anterior edge of wings not dark. The status of this species would be clarified on receipt of its original description and this paper will be useful in this regard.

REFERENCES

GHOSH, S.K. (1998): Faunal Diversity in India: Neuroptera. Pp. 251-257, Edited by Alfred *et al.* ENVIS Centre, Zoological Survey of India, Calcutta. 495 pp. GHOSH, S.K. (2000): Neuroptera fauna of northeast India Rec. zool. Surv. India, Occ. Paper No. 184: 179.

IMMS, A.D. (1977): A General Textbook of Entomology. Revised by

O.W. Richards & R.G. Davies, Vol. II. Pp. 421-1354. Published by Chapman and Hall, London.

Navas, L. (1931): Acanthacorydalis horrenda. Rev. Acad. Cienc. Madrid. 26: 73.

Varshney, R.K. (2002): Insectia. *Bionotes* 4(1): 20-22.

VARSHNEY, R.K. (2005): On two rare insect Orders (Auct) Megaloptera

(alderflies) and Raphidiodae (snake flies) in India. *Bionotes* 7(1): 30-32.

LIU, XING YUE, DING YANG, SI QIN, GE & XING KE, YANG (2005): Phylogenetic review of the Chinese species of Acanthacorydalis (Megaloptera, Corydalidae). Zoologica Scripta Vol. 34(4): 373.

25. ADDITIONS TO THE COCCINELLID FAUNA OF THE ANDAMAN ISLANDS AND THE BIOLOGY OF THE ENDEMIC *CHILOCORUS COELOSIMILIS* KAPUR 1966 (COLEOPTERA: COCCINELLIDAE)¹

K. Veenakumari 2,3 and Prashanth Mohanraj 2,4

¹Accepted June 23, 2004

Family

In spite of their economic importance both as phytophages and as efficient predators of crop pests, the Coccinellidae of the Andaman Islands remain poorly known to this day. The first Coccinellid, Epilachna nevilli from these Islands was described as an endemic species by Dohrn in 1880 – 22 years after the British occupied these Islands, with the purpose of establishing a penal colony. In the next 51 years, only two more species were added, of which Rodolia andamanica Wise was also endemic. No more additions were made till Kapur (1966) based largely on specimens collected sporadically between 1959 and 1964 by members of the Zoological Survey of India, recorded 26 more species, with four endemics from these Islands in 1966. With this the total number of species known from these islands rose to 29, of which 6 are endemics (Kapur 1966). No additions have since been made to the Coccinellid fauna of the Andaman Islands. It was in this context that the current study was undertaken. to enable the further documentation of the Coccinellid diversity of these islands.

The Andaman archipelago is a chain of a little over 320 islands, situated in the Bay of Bengal between the 10° N and 14° N. Oceanic in origin (Prashanth Mohanraj and Veenakumari 1996), these Islands were inhabited solely by hunter-gatherer tribes for centuries, till the British established themselves here in 1858 following an earlier abortive attempt to do so in the last decade of the eighteenth century. It was only after the arrival of the British in the mid-nineteenth century, that these Islands began to be scrutinized for their natural historical productions.

No special techniques were employed to collect these beetles. Adults were collected from the foliage from both forests and crop fields and processed using routine entomological procedures. The immature stages were also collected whenever noticed, brought to the laboratory and reared.

All the specimens collected/reared were sent to the Natural History Museum, London, to ascertain their identities.

Additions to the native Coccinellid fauna

Coccinallidae

Harmonia sp.

Twenty seven species of Coccinellids were collected during the course of this study. Twelve of these are being recorded for the first time from these Islands (Table 1). Only four Coccinellids have been identified to the species level,

Table 1: Coccinellidae (Coleoptera: Cucujoidea) recorded for the first time from the Andaman islands, India

Family	Coccinellidae
Subfamily	Sticholotidinae * <i>Jauravia pallidula</i> Motschulsky * <i>Serangium</i> sp.
Subfamily	Scymninae Scymnus fuscatus Boheman Scymnus sp. *Pseudoscymnus spp. 1 & 2 *Cryptogonus sp.nr. bilineatus Kapur Stethorus sp.
Subfamily	Coccidulinae Rodolia fulvescens Hoang
Subfamily	Chilocorinae Chilocorus sp.nr. nigrita (Fabricius) *Platynaspis sp.
Subfamily	Coccinellinae *Bothrocalvia pupillata (Swartz)

^{*}Taxa being recorded for the first time from the Andaman islands

²Central Agricultural Research Institute, P.B. No. 181, Port Blair, 744 101, Andaman and Nicobar Islands, India.

³Present Address: Project Directorate of Biological Control, P.B. No. 2491, H.A. Farm, Hebbal, Bengaluru 560 024,

Karnataka, India. Email: veenaprashi@rediffmail.com

⁴Email: veenapmraj@rediffmail.com